

Title (en)  
DRIVE SYSTEM OF SYNCHRONIZED ELECTRIC MOTOR

Title (de)  
ANTRIEBSSYSTEM FÜR EINEN SYNCHRONISIERTEN ELEKTROMOTOR

Title (fr)  
SYSTÈME D'ATTAQUE DE MOTEUR ÉLECTRIQUE SYNCHRONISÉ

Publication  
**EP 2613435 B1 20150909 (EN)**

Application  
**EP 11821469 A 20110726**

Priority  
• JP 2010196885 A 20100902  
• JP 2011067002 W 20110726

Abstract (en)  
[origin: EP2613435A1] A synchronous electric motor drive system capable of driving at speeds near zero is provided. An energization mode determination unit 9 switches six energization modes successively based on a terminal potential value detected of the de-energized phase of a three-phase synchronous electric motor 4 or on a stator winding wire connection point potential value (neutral point potential) detected of the three-phase synchronous transmission unit. A voltage command correction unit 8 corrects by a correction amount #V an applied voltage command destined for the synchronous electric motor so as to supply the synchronous electric motor with a repeated waveform of a positive pulse voltage, a negative pulse voltage, and a zero voltage as a line voltage waveform of the energized phases in each of the six energization modes, the positive pulse voltage being polarized to cause the synchronous electric motor to generate a forward rotation torque, the negative pulse voltage causing the synchronous electric motor to generate a reverse rotation torque. The line voltage of the energized phases is applied to the synchronous electric motor.

IPC 8 full level  
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